AMENDMENTS TO THE SPECIFICATION

Page 1, after the title insert the following:

--This application is a U.S. national phase of Int'l Appln. No. **PCT/IB2003/005092**, filed **12 November 2003**, and claims priority of **IT BO2002A000714**, filed **13 November 2002**; the entire contents of each of which are hereby incorporated by reference.--

Page 6, replace the first paragraph starting at line 1 with the following:

Table 1 (enlarged 1A-1B) shows the ~~aminoacid~~ amino acid sequences (SEQ ID NOS:1-10) of the wheat proteins chosen for the expression in rice and the preserved C-terminal motive LKVAKAQQLAAQLPAMCR (position 945-962 or SEQ ID NO:11).

Page 6, replace the second paragraph starting at line 4 with the following:

Table 2 shows the nucleotide sequence (SEQ ID NO:12) of the gene for the guinea pig transglutaminase enzyme.

Page 6, replace the third paragraph starting at line 6 with the following:

Table 3 shows one of the nucleotide sequences of rice's regulation region (SEQ ID NO:13) used for the seed-specific expression of wheat and guinea pig genes.

Page 6, replace the fourth paragraph starting at line 8 with the following:

Table 4 shows the oligo-nucleotide ~~sequence~~ sequences (SEQ ID NOS:14-35) used for the cloning of some wheat storage proteins genes and the guinea pig transglutaminase enzyme.

Page 11, replace the first paragraph starting at line 3 with the following:

Figure 26 shows, by way of example, the result of a PCR analysis aimed at demonstrating the presence of the gene for the transglutaminase enzyme in the transformed lines. The agarose gel is stained with Ethidium bromide and photographed under UV light to highlight the amplification products obtained using DNA extracted from leaves of rice lines transformed with the pIGP2100 vector and two primers (SEQ ID NOS:34-35) that amplify the gene of about 2070 [[pb]] bp. 1kb = molecular weight

markers; P+ = positive control (plasmid DNA); B = negative control (DNA extracted from a plant of the Rosa Marchetti variety). The plants represent the progeny of some transformed lines.

Page 11, replace the second paragraph starting at line 12 with the following:

Detailed description of the invention.

For the cloning of the sequences corresponding to the glutenin genes of high molecular weight, of wheat, with or without the regulation region, the polymerase chain reaction (PCR) technique was used, starting from the information sequences present in the databank. Genomic DNA extract from the leaves of Triticum Aestivum cultivar Cheienne, Chiarano, Centauro, Golia, Pandas and Veronese was used. Some of the oligonucleotides used for the specific amplification are reported in table 4 (SEQ ID NOS:14-35).

Page 11, replace the third paragraph starting at line 20 with the following:

For the cloning of the sequence corresponding to the guinea pig's gene that codes for the transglutaminase enzyme, the RT-PCR technique was used. In this case total RNA extract from guinea pig's liver was used and the amplification specific oligonucleotides are reported in table 4 (SEQ ID NOS:14-35).

Page 12, replace the second paragraph starting at line 5 with the following:

Specifically, the modified nucleotide sequences code for the ~~aminoacid~~ amino acid sequences of the type-as a non-restrictive example-PFPQPQLPY, PQPQLPYPQ, PYPQPQLPY, LQLQPFPQPQLPY, QQGYYPTSPQQSG, QQGYYPTS, PFSQQQQQ, QSEQSQQPFQPQ and QXPQQPQQF (SEQ ID NOS:36-44, respectively) paying special attention to the replacement of the glutamin and of the other ~~aminoacids~~ amino acids in underlined positions (Willemun et al., 2002; Shan et al., 2002).

Page 14, replace the first paragraph starting at line 1 with the following:

Example 1: cloning of the genes that code for wheat proteins.

The genes of interest were cloned starting from genomic DNA of wheat extracted from single varieties known as having a good expression of the protein of interest. The bread wheat Cheienne, Chiarano, Centauro, Golia, Pandas and Veronese were mainly used. The genomic DNA was used as the template in PCR reactions that had to be optimized for each single gene (Mullis and Faloona, 1987). As an example, the conditions applied for the amplification of the gene Ax1 are reported here: initial denaturation at 98°C for three minutes, followed by 38 cycles of denaturation at 95° for one minute, annealing at 62° for one minute, extension at 72° for four minutes, followed by a final synthesis at 72° for ten minutes. The primers used were drawn for each single gene (SEQ ID NOS:14-35 in table 4) considering both the structural part by itself, from the ATG to the stop codon, and the structural part plus the regulation region in 5'and in 3'.

Page 18, replace line 1 with the following:

Table [[1a]] 1A (SEQ ID NOS:1-10)

Page 19, replace line 1 with the following:

Table [[1b]] 1B (SEQ ID NOS:1-10)

Page 20, replace line 1 with the following:

Table 2 (SEQ ID NO:12)

Page 20, replace the second paragraph starting at line 2 with the following:

Table 2 shows the nucleotide sequence (SEQ ID NO:12) of the gene that codes for the guinea pig transglutaminase enzyme that we cloned starting from mRNA of liver and then sequenced. The underlined bases indicate the start and stop codons.

Page 21, replace line 1 with the following:

Table 3 (SEQ ID NO:13)

Page 22, replace line 1 with the following:

Table 4 (SEQ ID NOS:14-35)